

VECTOR REGISTER FILE WITH ARBITRARY

VECTOR ADDRESSING

ABSTRACT OF THE DISCLOSURE

5           A system and method for processing operations that use  
data vectors each comprising a plurality of data elements,  
in accordance with the present invention, includes a vector  
data file comprising a plurality of storage elements for  
storing data elements of the data vectors. A pointer array  
10 is coupled by a bus to the vector data file. The pointer  
array includes a plurality of entries wherein each entry  
identifies at least one storage element in the vector data  
file. The at least one storage element stores at least one  
data element of the data vectors, wherein for at least one  
15 particular entry in the pointer array, the at least one  
storage element identified by the particular entry has an  
arbitrary starting address in the vector data file.